

Amendments to the Claims:

1. (currently amended) A method of generating downlink power information for a multi-sector base transceiver site in which power can be shared between existing amplifiers of the sectors, the method comprising the steps:

gathering downlink power information for each sector;

when the total power required by the sectors is less than the total power available from the base transceiver site, modifying the gathered downlink power information for each sector to pre-empt traffic loading such that a more heavily loaded sector will be disproportionately allocated more power than a less heavily loaded sector;

forwarding the modified downlink power information to an overload control module and a radio resource manager controlling the multi-sector base transceiver site; and

determining a loading of each sector using thresholds to determine an overload in one or more sectors depending at least partly on the modified downlink power information, wherein the power to each sector is adjusted disproportional to the degree with which the sector is loaded.

2. (original) The method as claimed in claim 1 wherein the step of modifying the gathered downlink power information is carried out on the downlink power information for one or more of the sectors.

3. (previously presented) The method as claimed in claim 1 wherein the modification carried out in the step of modifying the gathered downlink power information depends on the relative magnitude of the total gathered power and the available power of the multi-sector base transceiver site.

4. (previously presented) The method as claimed in claim 1 wherein the step of modifying the gathered downlink power information results in the allocation by the radio resource manager of spare capacity from lightly loaded sectors to more heavily loaded sectors.

5. (previously presented) The method as claimed in claim 1 wherein the step of modifying the gathered downlink power results in the amount of spare capacity allocated to a sector being related to the degree of loading or overloading of the sector.

6. (previously presented) The method as claimed in claim 4 wherein the evaluation of respective loading on sectors is determined with regard to information relating to the loading of the sector determined by a multi-band filter.

7. (previously presented) The method as claimed in claim 1 wherein the step of modifying the gathered downlink power information results in the modified power information for a more heavily loaded sector being less than the modified power information of a less heavily loaded sector.

8. (previously presented) The method as claimed in claim 1 wherein the step of modifying gathered downlink power information results in the sum of the reported powers for the sectors becoming greater than the sum of the gathered powers for the sectors, if the sum of the gathered powers is greater than a threshold power.

9. (original) The method as claimed in claim 8 wherein the threshold power is determined by the total power available to the base transceiver site.

10. (previously presented) The method as claimed in claim 1 wherein average loading and/or variance power requirements information is used in determining how to modify the gathered power information.

11. (original) The method as claimed in claim 10 wherein average load and/or variance information is obtained from multi-band filters applied to the gathered power requirements.

12. (canceled).

13. (currently amended) An apparatus for generating downlink power information for a multi-sector base transceiver site in which power can be shared between existing amplifiers of the sectors, the apparatus comprising:

a power scaling module for modifying gathered downlink power information for each sector to pre-empt traffic loading such that a more heavily loaded sector will be allocated more power than a less heavily loaded sector when the total power required by the sectors is less than the total power available from the base transceiver site; and  
an overload control module coupled to the power scaling module and a radio resource manager controlling the multi-sector base transceiver site, the overload control module and a radio resource manager for receiving the modified downlink power information from the power scaling module, wherein the overload control module determines a loading of each sector using thresholds to determine an overload in one or more sectors depending at least partly on the modified downlink power information, and the radio resource manager adjusts the power to each sector disproportional to the degree with which the sector is loaded.

14. (previously presented) The apparatus as claimed in claim 13 further comprising a power measurement module for gathering downlink power information.

15. (canceled).

16. (canceled).